Serial No.: 10/764,143

In the claims: The claims are as follows.

1. (Currently amended) A method by which a <u>UE-user equipment</u> device—(11) configured for wireless communication with a node (10) of a wireless communication system is instructed to adjust the value of a data rate pointer—(11a) maintained in the <u>UE user equipment</u> device—(11), the data rate pointer—(11a) indicating a maximum allowed data rate available to the <u>UE user equipment—(11)</u> for uplink transmission of data to the node—(10), the method including comprising:

a step (26) in which the node (10) issues issuing to the UE user equipment device (11) a pointer change command in response to a change request by the UE user equipment device (11), the node (10) issuing the change command based on predetermined rules; and

a step (27) in which the UE user equipment device (11) adjusts adjusting the data rate pointer (11a) according to the change command and based on predetermined rules for interpreting the change command;

the method-characterized in that wherein the predetermined rules used by the node—(10) in responding to the change request differ depending on the current value of the data rate pointer (11a).

- 2. (Currently amended) The method of claim 1, further characterized in that wherein the predetermined rules differ depending on the current value of the data rate pointer—(11a) compared to a threshold value for the data rate pointer—(11a).
- 3. (Currently amended) The method of claim 2, further characterized in that wherein if the current value is less than the threshold value, the change command signals a new value for

Serial No.: 10/764,143

the data rate pointer—(11a) or signals a number of steps by which to increment the data rate pointer—(11a).

- 4. (Currently amended) The method of claim 3, further characterized in that wherein the new value is signaled using a shared downlink channel along with an indicator for identifying the UE user equipment device (11).
- 5. (Currently amended) The method of claim 3, further characterized in that wherein the new value is signaled using a downlink dedicated physical data channel—(DPDCH).
- 6. (Currently amended) The method of claim 3, further characterized in that wherein the new value is signaled using a downlink dedicated data channel or a downlink dedicated signaling channel.
- 7. (Currently amended) The method of claim 1, further characterized in that wherein in accord with the predetermined rules used by the node—(10) in responding to the change request, the—UE user equipment device—(11) interprets the change command differently for different values of the current value of the data rate pointer—(11a).
- 8. (Currently amended) The method of claim 7, further characterized in that wherein the predetermined rules differ depending on the current value of the data rate pointer—(11a) compared to a threshold value for the data rate pointer—(11a).
- 9. (Currently amended) The method of claim 8, wherein the change command is an increment pointer command, and the method is further characterized in that if the current value is less than the threshold value, then the UE user equipment device—(11)

Serial No.: 10/764,143

interprets the increment pointer command as a command to change the data rate pointer—(11a) to a predetermined fast ramp-up pointer value or to change the data rate pointer—(11a) by a predetermined fast ramp-up number of steps.

- 10. (Currently amended) The method of claim 8, wherein the change command is a decrement pointer command, and if the current value is zero, then the <u>UE</u> user equipment device (11) interprets the decrement pointer command as a command to change the data rate pointer (11a) to a predetermined fast ramp-up pointer value or to change the data rate pointer (11a) by a predetermined fast ramp-up number of steps.
- 11. (Currently amended) The method of claim 8, further characterized in that wherein if the current value is less than the threshold value, then the node—(10) issues a sequence of bits of a predetermined length as the pointer change command, and the UE user equipment device—(11) interprets the sequence of bits as conveying a value to which to change the data rate pointer—(11a) or as conveying a number of steps by which to change the data rate pointer—(11a).
- 12. (Currently amended) The method of claim 11, further characterized in that wherein the first bit of the sequence of bits is a pointer increment command, and upon receiving the first bit of the sequence the UE user equipment device (11) immediately increments the data rate pointer—(11a) by one step, and upon receiving the other bits of the sequence the UE user equipment device—(11) changes the data rate pointer—(11a) according to the predetermined rules governing receiving the sequence of bits as the pointer change command.
- 13. (Currently amended) The method of claim 12, further

Serial No.: 10/764,143

characterized in that wherein if a first bit in a sequence of pointer change command bits is not a pointer increment command, the UE user equipment device (11) interprets the first bit and the subsequent bits as individual pointer change commands.

14. (Currently amended) A computer program product comprising: a computer readable storage structure embodying computer program code thereon for execution by a computer processor in a node—(10) of a wireless communication system, with said computer program code characterized in that it includes comprising instructions for performing the steps of the a method of claim 1 indicated as being—to be performed by the node, including:

issuing to a user equipment device a pointer change command to change a pointer indicating a maximum allowed data rate, in response to a change request by the user equipment device, the node issuing the change command based on predetermined rules,

wherein the predetermined rules used by the node in responding to the change request differ depending on the current value of the data rate pointer—(10).

15. (Currently amended) A computer program product comprising: a computer readable storage structure embodying computer program code thereon for execution by a computer processor in a user equipment device—(11) adapted for communication via a wireless communication system, with said computer program code comprising instructions for a method to be performed by the user equipment device, including:

adjusting a data rate pointer according to a pointer change command to change a pointer indicating a maximum allowed data rate, with the adjusting performed based on predetermined rules for interpreting the change command;

Serial No.: 10/764,143

wherein the change command is received from a node in response to a change request provided to the node by the user equipment device, and the predetermined rules used by the node in responding to the change request differ depending on the current value of the data rate pointerwith said computer program code characterized in that it includes instructions for performing the steps of the method of claim 1 indicated as being performed by the UE device (11).

equipment device—(11) configured for wireless communication with a node—(10) of a wireless communication system, the apparatus for use in adjusting the value of a data rate pointer—(11a) maintained in the—UE\_user equipment device—(11), the data rate pointer—(11a) indicating a maximum allowed data rate available to the—UE\_user equipment—(11) for uplink transmission of data to the node—(10), the apparatus includingcomprising:

means—(27) by which the UE user equipment device—(11) receives from the node—(10) a pointer change command; and

means (27) by which the <u>UE user equipment</u> device (11) adjusts the data rate pointer (11a) according to the change command;

17. (Currently amended) An apparatus for use by a node—(10) of a wireless communication system configured for wireless communication with a—UE\_user equipment device—(11), the apparatus for use in adjusting the value of a data rate pointer—(11a) maintained in the—UE\_user equipment device—(11), the data rate pointer—(11a) indicating a maximum allowed data rate available to

Serial No.: 10/764,143

the <u>UE</u> user equipment (11) for uplink transmission of data to the node (10), the apparatus including comprising:

means—(26) by which the node—(10) issues to the—UE\_user equipment device—(11) a pointer change command for changing the value of the data rate pointer—(11a) in response to a change request from the—UE\_user equipment device, with the change command based on predetermined rules that differ depending on the current value of the data rate pointer—(11); and

means by which the node—(10) tracks the value of the data rate pointer—(11a);

the apparatus characterized by responding to the change request with a pointer change command based on predetermined rules that differ depending on the current value of the data rate pointer (11a).

18. (Currently amended) A system including components hosted by a node—(10) of a wireless communication system and also components hosted by a—UE\_user equipment device—(11) configured for wireless communication with the node—(10), the system for use in instructing the—UE\_user equipment device—(11) to adjust the value of a data rate pointer—(11a) maintained in the—UE\_user equipment device—(11), the data rate pointer—(11a) indicating a maximum allowed data rate available to the—UE\_user equipment—(11) for uplink transmission of data to the node—(10), the system includingcomprising:

means—(26) by which the node—(10) issues to the <u>UE user</u>

<u>equipment</u> device—(11) a <u>pointer</u> change command in response to a change request by the <u>UE user equipment</u> device—(11), the node (10) issuing the change command based on predetermined rules for responding to the change request; and

Serial No.: 10/764,143

means—(27) by which the <u>UE</u> user equipment device—(11) adjusts the data rate pointer—(11a) according to the change command and based on predetermined rules for interpreting the change command;

the system characterized in that wherein the predetermined rules used by the node (10) in responding to the change request differ depending on the current value of the data rate pointer (11a).

- 19. (Currently amended) The system of claim 18, further comprising a controller element (14) of a core network of the wireless communication system, and further characterized in that wherein the controller element (14) is configured to communicate communicates—to the node—(10) and to the—UE user equipment device (11) via the node—(10) information sufficient to specify parameters of the predetermined rules.
- 20. (Original) The system of claim 19, wherein the parameters include the threshold or the information characterizing a threshold.
- 21. (Original) The system of claim 20, wherein the information characterizing a threshold is one or more allowed data rates.
- 22. (Original) The system of claim 20, wherein the parameters include the predetermined fast ramp-up pointer value.
- 23. (Original) The system of claim 20, wherein the parameters include the predetermined fast ramp-up number of steps.
- 24. (New) An apparatus for use by a user equipment device configured for wireless communication with a node of a wireless communication system, the apparatus for use in adjusting the

Serial No.: 10/764,143

value of a data rate pointer maintained in the user equipment device, the data rate pointer indicating a maximum allowed data rate available to the user equipment for uplink transmission of data to the node, the apparatus comprising a computer processor configured to:

receive from the node a pointer change command; and adjust the data rate pointer according to the change command by interpreting the change command based on predetermined rules that differ depending on the current value of the data rate pointer.

- 25. (New) The apparatus of claim 24, wherein in accord with the predetermined rules, the processor is configured to interpret the change command differently for different values of the current value of the data rate pointer.
- 26. (New) The apparatus of claim 24, wherein the predetermined rules differ depending on the current value of the data rate pointer compared to a threshold value for the data rate pointer.
- 27. (New) The apparatus of claim 26, further wherein if the current value is less than the threshold value, the change command according to the predetermined rules signals a new value for the data rate pointer or signals a number of increments by which to increment the data rate pointer.
- 28. (New) The apparatus of claim 26, wherein the change command is an increment pointer command, and the processor is configured so that if the current value is less than the threshold value, then the processor interprets the increment pointer command as a command to change the data rate pointer to a predetermined fast ramp-up pointer value or to change the data rate pointer by a predetermined fast ramp-up number of steps.

Serial No.: 10/764,143

29. (New) The apparatus of claim 26, wherein the change command is a decrement pointer command, and the processor is configured so that if the current value is zero, then the processor interprets the decrement pointer command as a command to change the data rate pointer to a predetermined fast ramp-up pointer value or to change the data rate pointer by a predetermined fast ramp-up number of steps.

- 30. (New) The apparatus of claim 26, wherein if the current value is less than the threshold value, then the pointer change command is a sequence of bits of a predetermined length, and the processor is configured so as to interpret the sequence of bits as conveying a value to which to change the data rate pointer or as conveying a number of steps by which to change the data rate pointer.
- 31. (New) The apparatus of claim 30, wherein the first bit of the sequence of bits is a pointer increment command, and the processor is configured so that upon receiving the first bit of the sequence the user equipment device immediately increments the data rate pointer by one step, and upon receiving the other bits of the sequence the user equipment device changes the data rate pointer according to the predetermined rules governing receiving the sequence of bits as the pointer change command.
- 32. (New) The apparatus of claim 24, wherein the processor is configured so that if a first bit in a sequence of pointer change command bits is not a pointer increment command, the processor interprets the first bit and the subsequent bits as individual pointer change commands.
- 33. (New) An apparatus for use by a node of a wireless communication system configured for wireless communication with a

Serial No.: 10/764,143

user equipment device, the apparatus for use in adjusting the value of a data rate pointer maintained in the user equipment device, the data rate pointer indicating a maximum allowed data rate available to the user equipment for uplink transmission of data to the node, the apparatus comprising a computer processor configured to:

issue to the user equipment device a pointer change command for changing the value of the data rate pointer in response to a change request from the user equipment device, with the change command based on predetermined rules that differ depending on the current value of the data rate pointer; and

track the value of the data rate pointer.

- 34. (New) The apparatus of claim 33, wherein the processor is configured to issue the pointer change command so as to be signaled using a shared downlink channel along with an indicator for identifying the user equipment device.
- 35. (New) The apparatus of claim 33, wherein the processor is configured to issue the pointer change command so as to be signaled using a downlink dedicated physical data channel.
- 36. (New) The apparatus of claim 33, wherein the processor is configured to issue the pointer change command so as to be signaled using a downlink dedicated data channel or a downlink dedicated signaling channel.
- 37. (New) The apparatus of claim 33, wherein the predetermined rules differ depending on the current value of the data rate pointer compared to a threshold value for the data rate pointer.
- 38. (New) The apparatus of claim 37, further wherein if the current value is less than the threshold value, the change

Serial No.: 10/764,143

command is predetermined to signal a new value for the data rate pointer or signals a number of increments by which to increment the data rate pointer.

- 39. (New) The apparatus of claim 37, wherein if the current value is less than the threshold value, then the processor is configured to issue a sequence of bits of a predetermined length as the pointer change command according to a predetermined rule by which the user equipment device is to interpret the sequence of bits as conveying a value to which to change the data rate pointer or as conveying a number of steps by which to change the data rate pointer.
- 40. (New) The apparatus of claim 39, wherein the first bit of the sequence of bits is a pointer increment command, and according to the predetermined rules signals to the user equipment that upon receiving the first bit of the sequence the user equipment device is to increment the data rate pointer by one step, and upon receiving the other bits of the sequence the user equipment device is to change the data rate pointer according to the predetermined rules governing receiving the sequence of bits as the pointer change command.
- 41. (New) The apparatus of claim 33, wherein if a first bit in a sequence of pointer change command bits is not a pointer increment command, the first bit and the subsequent bits are to be interpreted by the user equipment device as individual pointer change commands.